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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,010	04/11/2001	Jun Man Kim	A34176	9706

21003 7590 09/08/2004

BAKER & BOTTS
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NEW YORK, NY 10112

EXAMINER	
GREY, CHRISTOPHER	

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/833,010	KIM ET AL.	
	Examiner	Art Unit	
	Christopher P Grey	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 April 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claim 1 line 19, the concept of the RVIA to perform selecting functions, is not disclosed in the specification.

Regarding claim 8 lines 6-7, the concept of RS-422 IPC that is GW interface with the compact base station controllers, is not explained in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 rejected under 35 U.S.C. 103(a) as being unpatentable over Seta (U.S Patent No. 6,483,825) in view of Parrish (U.S Patent No. 6614752):

The primary reference teaches a system for realizing a base station controller in a compact PCI, in a mobile communication system including a plurality of BTSs, comprising:

a compact base station controller main processor block (CMPB) which includes a compact base station controller main processor assembly (CMPA) and a rear processor interface assembly (RP1A), for managing call processing in base stations, disclosed in Seta (U.S Patent No. 6,483,825) Col 7 lines 62-64, which indicates a section of the BSC designed for terminating signals, and

compact base station controllers and controlling the system, a mobile station controller interface block (M1B) which is interfaced with the CMPB through a compact PCI and includes a mobile station controller vocoder interface and switching assembly (MVSA) and a rear mobile station controller interface assembly BVRA to provide an

interface function and generate a reference clock, as disclosed in Seta (U.S Patent No. 6,483,825) Col 5 lines 56-59 and the abstract, which indicates a BSC providing an interface and the generation of a reference time ;

a BTS interface block (BIB) which is connected to the BTSS and includes a base station controller vocoder interface and a router assembly BVRA and a rear base station controller interface assembly (RBIA) to route control data to the CMPB, as disclosed in Seta (U.S Patent No. 6,483,825) Col 5 lines 32-37 and lines 62-65, which indicates the path of a control signal;

a transcoder and selector bank (TSB) which is connected to the BIB and includes a compact base station controller vocoder operation assembly (CVOA), a vocoder extension buffer assembly VERA and a rear vocoder extension interface assembly RVIA to perform vocoding and selecting functions, as disclosed in Seta (U.S Patent No. 6,483,825) Col 5 lines 12-22, which indicates a BSC including a vocoder and switching equipment.

The primary reference discloses the claimed limitations discussed above, however does not teach the following:

a back plane for providing

a compact PCI bus, H.110 and 1/0 bus to the

CMPB; and

a system interface for performing interfacing among mobile station controllers, BTSS and compact base station controllers.

The secondary reference Parrish (U.S Patent No. 6614752) teaches a system comprising the following features:

a back plane for providing

a compact PCI bus, H.110 (disclosed as CT bus) and I/0 bus to the CMPB a system interface for performing interfacing among mobile station controllers, BTSs and compact base station controllers, is disclosed in Parrish (U.S Patent No. 6614752), particularly in elements 56 and 58 in Figure 2, Col 7 line 18- 15 (col 8) and in the script of the abstract.

Therefore it would have been obvious to one in the ordinary skill in the art at the time of the invention to combine the limitations disclosed by Seta (U.S Patent No. 6,483,825) with the limitations disclosed by Parrish (U.S Patent No. 6614752). The motivation for this is to have a high availability backplane.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seta (U.S Patent No. 6,483,825) in view of Parrish (U.S Patent No. 6614752) further in view of Take (U.S patent No. 5883887).

The primary and secondary reference disclose all of the limitations discussed above. The primary and secondary reference do not teach the following regarding claim 3:

the RPIA supports an Ethemet port for executing operation and maintenance of one to three compact basestation controllers.

The third reference Take (U.S patent No. 5883887) teaches a method comprising the following features:

BSC supports an Ethernet port for executing operation and maintenance of one to three compact basestation controllers is disclosed in Take (U.S patent No. 5883887) Col 16 lines 42-50. Therefore it would have been obvious to one in the ordinary skill in the art at the time of the invention to combine the limitations disclosed by Seta (U.S Patent No. 6,483,825) with the limitations disclosed by Parrish (U.S Patent No. 6614752) and further combine the limitations disclosed by Take (U.S patent No. 5883887). The motivation for this is to provide terminal identifier management.

Claims 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seta (U.S Patent No. 6,483,825) in view Parrish (U.S Patent No. 6614752) in further view of Antonio et al (U.S patent No.6483817).

The primary and secondary references disclose all of the limitations discussed above. The primary and secondary reference do not teach the following:

Regarding claim 5, the RMIA provides an E1/T1 trunk node for interfacing with the mobile station controllers.

Regarding claim 7, the RBIA provides an E1/T1 fractional E1 interface, extended compact base station controller HDSL packet data interface, and H.110 relay link interface with the BTSS.

Regarding claim 8, the system interface corresponds to channeled E1/T1 that is the interface between the mobile station controllers and the compact base station

controllers, 1S-634(A), EI/TI fractional EI.PC that is the interface between the BTSS and compact base station controllers, RS-422. IPC that is GW interface with the compact base station controllers, TCP/P that is Ethernet between the compact base station controllers and base station operation system interface, H. 110 that is the interface between a main shelf and a extension shelf a compact PCI that is the interface between the main processor router and a switch, and H.110 that is the interface between a vocoder router and the switch. However, the primary and secondary references teach a PCI and H.110 interface mentioned above.

The fourth reference Antonio et al (U.S patent No.6483817) teaches a method comprising the following features:

Regarding claim 5 the BSC provides an E1/T1 trunk node for interfacing with the mobile station controllers, is disclosed in Antonio et al (U.S patent No.6483817) Col 2 lines 12-20 .

Regarding claim 7, the BSC provides an E1/T1 fractional E1 interface, extended compact base station controller HDSL packet data interface, and H.110 relay link interface with the BTSs, is disclosed in Antonio et al (U.S patent No.6483817) in Col 5 lines 4-13.

Regarding claim 8, the fourth reference teaches the system interface corresponds to channeled E1/T1 that is the interface between the mobile station controllers and the compact base station controllers, 1S-634(A), EI/TI fractional EI.PC that is the interface between the BTSS and compact base station controllers, is disclosed in Antonio et al (U.S patent No.6483817) Col 2 lines 14-20; RS-422. IPC that is GW interface with the

compact base station controllers, TCP/P that is Ethernet between the compact base station controllers and base station operation system interface, is disclosed in Antonio et al (U.S patent No.6483817) element 96 in fig 4; H. 110 that is the interface between a main shelf and a extension shelf a compact PCI that is the interface between the main processor router and a switch, and H.110 that is the interface between a vocoder router and the switch, as disclosed by the primary and secondary references.
Therefore it would have been obvious to one in the ordinary skill in the art at the time of the invention to combine the limitations disclosed by Seta (U.S Patent No. 6,483,825) with the limitations disclosed by Parrish (U.S Patent No. 6614752) and further combine the limitations of Antonio et al (U.S patent No.6483817). The motivation for this is to provide terminal identifier management and have a high availability backplane.

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seta (U.S Patent No. 6,483,825) in view of Parrish (U.S Patent No. 6614752) in further view of Lu et al (U.S patent No.6597912).

The primary and secondary references disclose all of the limitations discussed above. The primary and secondary reference do not teach the following
Regarding claim 2, the CMPA as a main processor of the compact base station controllers takes charge of management of call resources in the base stations and the compact base station controllers, operator interface, processing and managing failures/alarms, status management, system diagnostics management, processing base

station controller calls, system form management, system loading and processing statistics.

Regarding claim 6, the BVRA manages BTS trunks connected to the BTSs and routes all control data transmitted to the CMPA.

The fifth reference Lu et al (U.S patent No.6597912) teaches a method comprising the following features:

Regarding claim 2, the CMPA as a main processor of the compact base station controllers takes charge of management of call resources in the base stations and the compact base station controllers, operator interface, processing and managing failures/alarms, status management, system diagnostics management, processing base station controller calls, system form management, system loading and processing statistics, is disclosed in Lu et al (U.S patent No.6597912) Col 4 lines 21-64 and Col 7 lines 15-30.

Regarding claim 6, the base station manages BTS trunks connected to the BTSs and routes all control data transmitted, as disclosed in the abstract of Lu et al (U.S patent No.6597912).

Therefore it would have been obvious to one in the ordinary skill in the art at the time of the invention to combine the limitations disclosed by Seta (U.S Patent No. 6,483,825) with the limitations disclosed by Parrish (U.S Patent No. 6614752) and further combine the limitations of Lu et al (U.S patent No.6597912). The motivation for this is to communicate inbound and outbound information with mobile service centers.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seta (U.S Patent No. 6,483,825) in view of Parrish (U.S Patent No. 6614752) in further view of Astrin (U.S patent No. 6026082).

The primary and secondary references disclose all of the limitations discussed above. The primary and secondary reference do not teach the following:

Regarding claim 4, the MVSA manages mobile station controller trunks connected to the mobile station controllers and executes an 15-634 (A) interface, vocoder switching, an IWF interface and generation of a reference clock, the MVSA being interfaced with the CMPA using the compact PCI bus.

The sixth reference Astrin (U.S patent No. 6026082) teaches a method comprising the following features:

Regarding claim 4, managing mobile station controller trunks connected to the mobile station controllers and executes an 1S-634 (A) interface, as disclosed in Col 5 lines 15-22; vocoder switching, as disclosed in Col 7 lines 30-34 and Col 8 lines 36-40; an IWF interface, Col4 lines 27-32; and generation of a reference clock, as disclosed in Col 6 lines 31-32; the MVSA being interfaced with the CMPA using the compact PCI bus, as disclosed in Col 4 lines 17-21.

Therefore it would have been obvious to one in the ordinary skill in the art at the time of the invention to combine the limitations disclosed by Seta (U.S Patent No. 6,483,825) with the limitations disclosed by Parrish (U.S Patent No. 6614752) and

further combine the limitations of Astrin (U.S patent No. 6026082). The motivation for this is to maximize the quality of communications at different times.

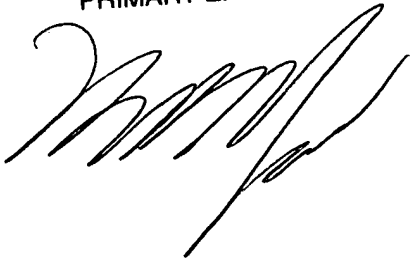
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Grey whose telephone number is (703)305-5743. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3160 ext 23160. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO
PRIMARY EXAMINER



Christopher Grey
Examiner
Art Unit 2667